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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,189	03/16/2001	Kevin D. Morishige	M-9631 US	6678

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EXAMINER	
HOM, SHICK C	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/811,189	MORISHIGE ET AL.	
	Examiner	Art Unit	
	Shick C. Hom	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 20-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-15* is/are allowed.

6)☒ Claim(s) *16,17 and 20-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/2/06 have been fully considered but they are not persuasive.

In response to pages 12-13 of the remarks and further in response to the interview of 30 January 2006, that it is not apparent which elements of Honig are being compared to the first, second, and third circuit, while Honig et al. does not specifically recite the first, second, and third circuit, Honig et al. in col. 1 lines 31-46 recite packet having an identification of the destination and further there are three types of connection, i.e. unicast, broadcast, and multicast, clearly for multicast and broadcast connections, the routing information identifies at least a first and second destination for the packet reads on the first and second circuit as claimed and further the information being broadcasted to the first and second destination reads on the third circuit being a function of the value of the first and second circuit which add the third value to the frame. Further, in page 15 of applicant's remark that Hong do not teach adding routing data to the frame is not persuasive because col. 1 lines 31-39 recite having routing tag

associated with the packet reads on adding routing data to the frame as claimed.

In page 13 line 8 to page 14 line 2 of the remarks, applicant argued that Honig et al. does not teach the first and second circuits recited in claim 16 because the controller/packet processor 26 of Fig. 2 of the I/F card 52 of Fig. 4 does not generate values as a function of data contained in a received data packet is not persuasive because a packet processor is a device which generates an output value as a function of the data in the input packet.

In page 14 line 3 to page 15 line 8 of the remarks applicant argued that Honig et al. does not teach the third circuit recited in claim 16. Applicant argued that while Honig's processor determines a destination output port for the data, it does not identify the destination port by generating a third value as a function of the first and second values is not persuasive because Honig et al. in col. 2 lines 48-59 recite that for broadcasting, the output value from the processor 26 as shown in Fig. 2 is placed in the broadcast queue Q_{bc} for broadcast to all output ports simultaneously, such as the first and second values of I/F card #1 and I/F card #2 as shown in Fig. 3 being placed in the broadcast queue Q_{bc} along with the third value of I/F card #3 whereby the routing tag is further

added to identify the destination for the packet reads on generating a third value as a function of the first and second values.

In page 15 line 9 to the end of page 16 of the remarks, applicant argued that Honig et al. does not teach generating and adding routing data to the data frame wherein the routing data is generated as a function of a destination address of the data frame and wherein the routing data identifies one of the data ports through which the data frame exit the switching fabric is not persuasive because col. 1 lines 33-40 which recite the routing tag identifying the destination of the data packet clearly corresponds to the header information in the data packet which identify the destination address; and col. 1 lines 41-46 which recite that the routing information further identifies a single destination for unicast connections, but several destination for broadcast connection by distributing the packet to all ports reads on identifying the data ports through which the data frame will exit the switching fabric to reach the destination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16-17 and 20-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Honig et al. (6,487,171).

Regarding claims 20-24:

Honig et al. disclose a method comprising: a memory circuit receiving a data frame to be transmitted to a destination device via a switching fabric, wherein the switching fabric comprises a plurality of data ports through which data frames enter or exit the switching fabric (see Fig. 4 which shows the crossbar switch 56 comprising IN PORT#1-N and OUT PORT#1-N for transmitting data received via the I/F cards 52 to destination device via the BC/UNI buffers and line 62), wherein the memory circuit is coupled to the switching fabric via one or more of the plurality of data ports (see Fig. 2 which is a detailed view of the I/F

cards including the memory 27 and queues 28 coupled to the switch via the IN PORTs); generating and adding routing data to the data frame received by the memory circuit, wherein the routing data is generated as a function of a destination address of the data frame, and further wherein the routing data identifies one of the plurality of data ports through which the data frame will exit the switching fabric to reach the destination device; the memory circuit transmitting the received data frame to the switching fabric after the routing data is added to the data frame; wherein the buffer is coupled to the switching fabric via a first pair of the plurality of data ports, and wherein the apparatus transmits the received data frame via on the first pair of the plurality of data ports after the routing data generation circuit adds the routing data to the data frame (see Fig. 4 the input/output ports 1-N of the switch clearly reads on the pair of data ports and col. 1 lines 33-46 and col. 2 lines 48-59 which recite the routing information identifying the destination for the packet and the processor, in the I/F card, in accordance with the connection information determines the destination output port for the data received which reads on the routing data generation and addition circuit).

Regarding claims 16-17:

Honig et al. disclose an apparatus comprising: a buffer configured to receive a data frame to be transmitted to a destination device via a switching fabric, wherein the switching fabric comprises a plurality of data ports through which data frames enter or exit the switching fabric (see Fig. 4 which shows the crossbar switch 56 comprising IN PORT#1-N and OUT PORT#1-N for transmitting data received via the I/F cards 52 to destination device via the BC/UNI buffers and line 62); a first circuit coupled to the buffer, wherein the first circuit is configured to generate a first value as a function of data contained in the received data frame; a second circuit coupled to the buffer, wherein the second circuit is configured to generate a second value as a function of data contained in the received data frame; a third circuit for generating a third value as a function of the first and second values, wherein the third circuit is configured to add the third value to the received data frame, wherein the third value identifies one of the plurality of data ports through which the received data frame will exit the switching fabric to reach the destination device (see col. 1 lines 33-40 which recite the routing tag for identifying the destination of the packet according to the three types of connection i.e. as to whether it is for unicast connections, broadcast connections, or multicast connections and

col. 2 lines 48-59 which recite the processor formatting and converting the received signal to packets for the switching matrix in accordance with the types of connection clearly reads on the first, second and third circuit for generating a value as a function of the data); wherein the buffer is configured to transmit the received data frame to the switching fabric after the third value has been added to the data frame and wherein the buffer is coupled to the switching fabric via first and second data ports thereof (see Fig. 4 the input/output ports 1-N of the switch clearly reads on via first and second data ports coupled to the switching fabric).

Allowable Subject Matter

4. Claims 1-15 are allowed.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
Lipp et al. disclose a phase re-alignment of SONET/SDH network switch without pointer manipulation.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH SH

Seema S. Rao 5/2/06
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